



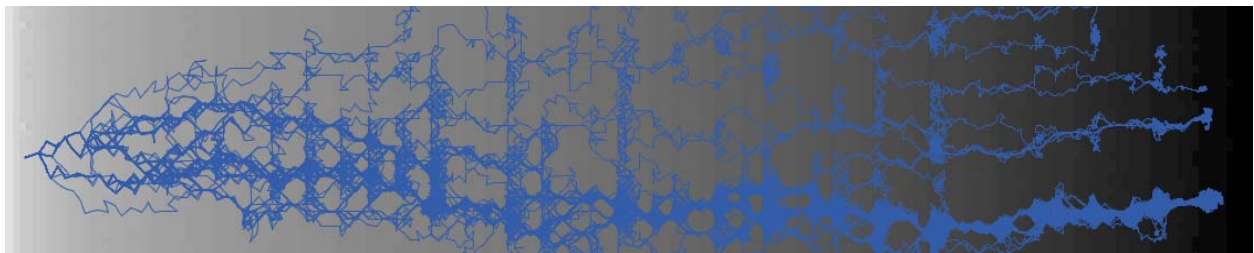
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### **EcoMachines for Saturated Grounds**

SUNE Spring 2010  
Upper Level Studio  
Laura Garofalo

The SUNE Graduate Research Group's studio will explore the relationship between architecture, landscape and water resources. Our dependence on and struggle to control fluvial systems, has shaped settlement patterns for centuries. Building on this understanding, the studio will study the effects, both adverse and beneficial, that social, political and economic circumstances have had on the management of water. More specifically we will address the problem of flooding which has become a salient feature of the daily news. We will develop architectural and landscape proposals that respond to the unpredictability of flooding as regions over-saturate or dry up due to climate change.

Student projects will propose a more direct role for architecture to ameliorate our ecosystems in response to flooding, while questioning the current standards proposed by LEEDs and the Sustainable Sites Initiative. Initial research will be organized around a series of site specific mappings and models which will range in scale from regional watersheds to urban drainage systems. This analysis will study the workings of fluvial systems, and the systems that have been devised to control them. Students will then explore the ever expanding range of infrastructure and landscapes that surround urban rivers and propose new possibilities for architecture in engage these dynamic systems. Addressing two sites, abandoned urban lots and highway rights of way, the projects will develop a network of self sustaining nodes that integrate the potentially destructive force of fluvial systems with alternative social and economic ecologies. The studio will explore multiple media for both analysis and design processes.



*Tidal Diagram, F. Matillana*